# The Philadelphia Orchard Project

The Philadelphia Orchard Project (POP) plants orchards in the city of Philadelphia to provide healthy food, green spaces and community food security.

There are 40,000 vacant lots and 50,000 chronically hungry children in Philadelphia. POP works with community groups to transform neglected urban spaces into vibrant community orchards filled with useful and edible plants.



This is an edible forest garden! POP ecological orchards, based upon the principles of Permaculture, are designed to work with nature instead of against it. The orchard has many layers and its plants have many functions: providing food or medicine, building soil quality, attracting beneficial insects, and more. Did you know that persimmons, hazelnuts, and kiwis are easy to grow in your backyard?

www.phillyorchards.org

## Orchards provide many benefits to cities:

Shade to reduce cooling costs, clean air, clean water, better nutrition and health, food that reduces hunger, jobs that reduce crime, and beauty that brings communities together.

Orchard trees absorb carbon emissions! Local food production reduces the use of fossil fuels!

For more info on POP and this display garden, please see our brochure inside the conservatory building.



### Philadelphia Orchard Project Display FACT SHEET

This display garden is a representation of the work of the Philadelphia Orchard Project (POP), a non-profit organization that plants orchards in the city of Philadelphia to provide healthy food, green spaces and community food security. There are 40,000 vacant lots and 50,000 chronically hungry children in Philadelphia. To help solve these problems, POP works with community groups to transform neglected urban spaces into vibrant community orchards with fruit and nut trees, berry bushes, and other useful plants. For more info about POP, please see <a href="https://www.phillyorchards.org">www.phillyorchards.org</a> and informational pamphlet to be available in the USBG Conservatory.

#### THIS IS AN EDIBLE FOREST GARDEN

The orchards planted by the Philadelphia Orchard Project are examples of a style of planting called Edible Forest Gardening. The basic idea is to create a functioning, diverse ecology in the orchard that mimics that of a natural forest. By working with nature instead of against it, these orchards are healthy and productive with relatively less maintenance required by their stewards. The concept of Edible Forest Gardens developed in Permaculture, a movement of ecological design that originated in Australia in the 1970's. Many native cultures across the world have also traditionally grown food in a similar manner.

#### ORCHARD DIVERSITY

This orchard consists of far more than rows of fruit trees. Like a natural forest, many layers of plants grow in an Edible Forest Garden, including trees, shrubs, perennials, groundcovers, and vines. By planting a multi-layered orchard, positive relationships are created between plants. All ecological niches are occupied, so there is less opportunity for weeds to invade. With yields from so many layers, overall production is increased. Yields can also be harvested from other layers in the short term before fruit and nut trees mature.

An Edible Forest Garden also features a diversity of plant choices within each layer. For example, instead of just one species of tree, this orchard features asian pears, an apple, a fig, a cherry, a plum, a persimmon, a serviceberry, a paw-paw, and a cornelian cherry. If one crop fails in a particular year, this diversity ensures that the orchard will still be productive. Pests are also often very plant specific, so a diverse orchard becomes a less attractive target.

The plants of the Edible Forest Garden are multi-functional. Beyond a diversity of seasonal foods, they provide medicine, nitrogen fixation, nutrient accumulation, pest control, pollinator attraction, shade, reduction of stormwater runoff, and absorption of carbon and other pollutants. Beauty in flowers, foliage, and fruit is another important function.

#### **OTHER DISPLAY FEATURES**

The bee boxes are placed in this display to represent the importance of bees for pollination of most fruit and nut crops. These boxes have been left empty to draw attention to the problem of colony collapse disorder that is currently devastating the bee industry and related agricultural production. Small scale beekeepers who raise honey bees in backyards and even on rooftops have been largely unaffected by colony collapse.

The water barrel represents a tiny ecology of its own. The plants, all of which are edible, provide oxygen and cover for the goldfish, which provide them fertilizer in return. The fish are content to eat insects, including mosquito larvae, and require no additional feeding. With a simple filtration system, a barrel like this can be set to catch water from a downspout. The planting containers illustrate that it isn't necessary to have a large yard to have an orchard. Dwarf trees, including this spire apple, can be grown in very small spaces. Berry bushes can also be grown in containers and even window boxes can be used for herbs and strawberries.

#### **DISPLAY SOURCES**

The POP display garden was made possible by generous discounts and donations from the following sources:

Useful Plants Nursery- Black Mountain, NC <u>www.usefulplants.org</u>

Edible Landscaping Nursery- Afton, VA <u>www.ediblelandscaping.com</u>

Ponds and Gardens of Limekiln- Glenside, PA <u>www.epondsandgardens.com</u>

Well-Sweep Herb Farm- Port Murray, NJ <u>www.wellsweep.com</u>

Raintree Nursery- Morton, WA <u>www.raintreenursery.com</u>

Fedco Seeds- Waterville, ME <u>www.fedcoseeds.com</u>

Design services for the display garden provided by:

Forsyth LLC- Philadelphia, PA <u>www.forsythgardens.com</u>